**Welcome:**

Welcome to ENVS 110: Humans and the Biological Environment. This is a course that will introduce you to the impacts human populations have on the environment and how the changing environment affects humans and non-human species.

I feel strongly that this material will be relevant to your future goals regardless of your major. All human systems are embedded within environmental systems. At times the connections are hard to see, but they are there. Without a healthy environment, all human systems fail, so understanding how we affect the environment and how the environment impacts our lives is critical.

In this course we will cover major concepts with the data and evidence that support those concepts. You will be responsible for understanding the concepts and having a command of the data and evidence.

I also include case studies to show the current state of affairs, provide relevance, and hopefully trigger thought and inspiration.

Taking a hard look at the state of the environment is not easy. The fact is we have caused serious damage and as a result face great challenges if we are to sustain the environment that sustains us. This can make the material difficult and at times a bit numbing. I encourage you to look at this issue as a set of challenges that need to be met. Each system that currently causes damage can be redesigned to decrease or eliminate that harm. Each redesign means opportunity for study or development of a career.

Catalog Course Description:

Growth and variations in populations of organisms and their interactions with the physical environment. Characteristics of living natural resources and changes caused by expanding human populations and technological developments. Satisfies SBCC General Education requirement in Natural Sciences when combined with ENVS 111. (Required for the Environmental Studies major.)

Description for Schedule of Classes:

Growth and variations in populations and their interactions with the environment. Emphasis on human alteration and intervention.

 **Course Student Learning Outcomes:**

* SLO1 - Explain and apply the fundamentals of evolution and population dynamics to the interaction of humans with the biological world.
* SLO2 - Explain how ecosystem function affects and is affected by producing food, securing water and producing energy and the resulting consequences for human populations.
* SLO3 - Analyze the sources of pollution and their impacts on ecosystems and human health.

**Contacting Me:**

My office is EBS 323. Office phone: 805-730-4194. Email: akgreen@pipeline.sbcc.edu

It is easiest to either send me a message through canvas or send me an email (akgreen@pipeline.sbcc.edu). I generally check my email several/multiple times throughout the day and will get back to you the same day you send your message. On weekends, however, my reply may be delayed, but usually not for very long. I won't guarantee a reply before 8am, after 5pm, or on the weekends, but practically speaking I am usually able to reply most any day and time.

**Course Communication:**

I communicate through pipeline email and canvas announcements for this course. This means you must check your pipeline email and canvas announcements at least once a day to make sure you do not miss important information.

**Materials:**

All the materials for the course (link to online text, discussion questions, quizzes, and activities) are found in the canvas shell. You do not need any other materials to complete the course.

The online text is linked to canvas or can be found [linked on my website](http://www.sbccenvsgreen.org/110/onlinetext/index.htm). The username and password for the online text is as follows (*provided each semester*)

The text is written by me and pulls from books, articles, and online content that I feel are good quality and written to the appropriate detail. There are numerous embedded videos, some are done by me to explain a concept and others provide relevance and visuals. I have included all links for any material I use for your reference and if you find the particular topic interesting and wish to pursue it further.

I use a remote proctoring system called Proctorio for the online section exams and final exam. This requires you have a working microphone and video camera for your computer. Most computers now have both, but if you do not have a video camera on your computer then you may need to purchase one.

**Course participation:**

This course has both hybrid and fully online sections. What that means is you will read the text and take regular quizzes and take exams on the information you read online. Each week you will have required reading and one or more quizzes to complete before class meets or you complete the online discussion questions.

For the hybrid sections, class time will not be the usual lecture style you may have in other courses. Instead I will have you work on developing more complete answers to the discussion questions and pushing the discussion further in class to see how well you are understanding and processing the material you are reading. For the online sections this same process will be fully online with your initial response to discussion questions and then a required review of another student's response.

Individually, in small groups, or as a class we will discuss the material to make sure everyone has a strong understanding, and this allows us to explore the concepts more deeply. Again, for the fully online sections this will happen through the online discussions.

This style of course requires attendance or timely completion of the online discussion questions. For the hybrid sections, I will take roll every class meeting and there will be points associated with participation. For the online sections, the same points will be associated with the online discussions. Completing the online pre-quizzes before you come to class will prepare you to discuss the topics when we are in class. Your points for participation will depend on you being actively engaged and participating with your fellow students. There will be post-quizzes that test some aspects of what we discussed.

You need to be on time for class every time and stay the entire time, so plan accordingly. Coming in late or leaving early disrupts the flow of the class and points will be deducted because if you miss any time in class it means you did not fully participate.

There are regular assignments and quizzes with strict due dates. If you miss deadlines you will lose points and may be dropped from the class. I do not want to assign a failing grade for someone who has decided to no longer participate. It is always your responsibility to drop, but if I suspect you are no longer participating, I may also drop you myself. So, it is very important that you stay up with the course at all times and submit assignments and quizzes on time.

**Deadlines:**

DO NOT DEPEND ON THE "TO DO" LIST ON THE RIGHT EDGE OF YOUR CANVAS START PAGE. This "to do" list is not reliable.

Deadlines are very strict. **There is no credit for late assignments or quizzes**. I feel that turning things in on time is critical to your success and constitutes minimal effort in your education. Canvas is programmed to simply stop allowing submissions after the deadline, and it has no sympathy. Do not wait until the last minute to submit an assignment because you risk something going wrong that delays your submission and could result in zero credit.

You will avoid missing points if you enter every assignment (quizzes, mid-terms, etc.) into whatever calendar program you use and include reminders. If you use something like Google Calendar you can import the canvas calendar into it- go to the canvas calendar and click on the link for the "calendar feed" at the bottom of the right side of the page. You can copy that into your Google Calendar by clicking on the "+" sign next to "add a coworker's calendar" and choosing "from a url" and paste the url you got from the canvas calendar feed. If I make any changes to the due dates, then I will let you know through canvas announcements and canvas sends notification as well- you may then need to re-add the canvas calendar if you use the Google Calendar system I just described. Whatever system you use you are responsible for turning in assignments on time.

**Exams:**

The exams for this class will be online and proctored by an online system called Proctorio. This requires that you have internet access and a working video camera for your computer. Most laptops have these already, but desktops often do not. Unfortunately, this system does not work on phones or tablets. It also requires the use of **Google Chrome**. I set up the syllabus quiz to use the Proctorio system so that everyone can make sure they get it working before we take an exam. This means you have to set up Proctorio right away.

**You need to download the Proctorio app into Google Chrome to take the exams**. If you do not do this then canvas will ask for an access code even though there isn't one. So, if you try and take an exam and it asks for an access code then you know you did not download Proctorio into Google Chrome correctly. Re-do it and you should get access to the exam.

[Proctorio Student Guide](file:///C%3A%5Ccourses%5C29258%5Cpages%5Cproctorio-student-guide)

**The Final Exam:**

**The final exam is cumulative**, meaning it will cover all aspects of the course. It will also be online using the Proctorio system.

**Grading:**

I calculate the final grade in 3 ways. First, I calculate a simple average of all the points possible. You can follow this through the grades option in canvas. Second, I just use the exams and participation. Third, I just use the final exam and participation. I will pick the option that benefits you most. The first method benefits those that do well throughout the course, the second method accounts for occasional stumbles on the quizzes, and the third option allows for those that may have not done well on exams during the semester, but finally got it by the time of the final exam.

**Accommodations for Students with Disabilities:**

Disability Services and Programs for Students (DSPS) coordinates all academic accommodations for students with documented disabilities at Santa Barbara City College. If you have or think you might have a disability that impacts your educational experience in this class, contact DSPS to determine your eligibility for accommodations.

DSPS is located in the Student Services (SS) Building, Room 160.  Their phone number is 805-730-4164.

If you have already registered with DSPS, please submit your accommodation requests via the ***‘DSPS Online Services Student Portal’***as soon as possible. This needs to be done each semester. *If you have any questions or concerns about your accommodations, please make an appointment with a DSPS Counselor.*

Complete this process in a timely manner to allow adequate time to provide accommodations.

**Acomodaciones para estudiantes con discapacidades:**

Los Programas y Servicios para Estudiantes con Discapacidades (DSPS) coordina todas las adaptaciones académicas para los estudiantes con incapacidades documentadas en Santa Barbara City College. Si usted tiene, o cree que podría tener una discapacidad que afecta a su experiencia educativa en esta clase, póngase en contacto con DSPS para determinar si califica para servicios.

La oficina de DSPS está situada en el edificio de Servicios Estudiantiles (SS), Salón 160. (805-730-4164)

Si ya está registrado en DSPS envíe las solicitudes de adaptación a través del ‘***DSPS Online Services Student Portal***’ tan pronto como sea posible. Debe completar este proceso cada término académico. Si tiene alguna pregunta o duda acerca de sus acomodaciones haga una cita con un consejero de DSPS.

Complete este proceso de una manera oportuna para permitir el tiempo necesario para ofrecer la debida acomodación.

**Course Content:**

***Make sure you do the Introduction Question and Syllabus Quiz right away. Completion of these assignments shows me that you are engaging in the course. If you do not complete these two assignments, then I may drop you from the course.***

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| Summer Session Schedule | Fall and Spring Semester Schedule | Content and Assignments |
| Week 1 | Week 1 | * Introduction Question
* Syllabus Quiz
 |
| Week 2: Biodiversity: Levels, Importance, and Distribution | *Text (Biodiversity):* Introduction, Levels and Importance, Distribution, The Niche, Food Webs and Trophic Transitions*Additional Reading:* How Our Health Depends on Biodiversity* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 2 | Week 3: Evolution | *Text (Biodiversity):* Evolution, DNA, Extinction*Additional Reading:* Pollinators* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 4: Threats to Biodiversity | *Text (Biodiversity):* Habitat Loss, Invasive Species, Overexploitation* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz

Exam 1: Biodiversity |
| Week 3 | Week 5: Populations | *Text (Populations):* Population Growth, Human Population, Population Demography*Additional Reading:* White-tailed Deer, The Effect of China’s One-Child Family Policy after 25 Years, China ends one-child policy. Is the earth's climate doomed?* Ecological Footprint Assignment
* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 4 | Week 6: Food Systems (Crops) | *Text (Food):* Crops*Additional Reading:* Effect of Localizing Fruit and Vegetable Consumption on Greenhouse Gas Emissions and Nutrition, Santa Barbara County* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 7: Food (Livestock, GMO’s) | *Text (Food):* Livestock, Genetic Engineering*Additional Reading:* Grub, Eating Bugs to Save the Planet* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz

Exam 2: Populations and Food |
| Week 8: Water Supply | *Text:* (Water): Supply*Additional Reading:* Drought In California and Santa Barbara, The Colorado River* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 9: Watershed and Water Pollution | *Text (Water):* Watershed Ecology and Water Quality*Additional Reading:* Southern Steelhead Trout* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 5 | Week 10: Energy (Fossil Fuels) | *Text (Energy):* Fossil Fuels*Additional Reading:* Nigeria's Agony Dwarfs the Gulf Oil Spill. The US and Europe Ignore It, Niger Delta Oil Spills Clean-up Will Take 30 years, Says UN, SB County Draft EIR on Cat Canyon Oil Drilling Project, How Will Three Proposed Cat Canyon Oil Projects Impact Our Community?* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 11: Energy (Nuclear, Renewable) | *Text (Energy):* Nuclear Power, Renewable Energy*Additional Reading:* A Plan for a Sustainable Future, Wind, Water, and Sun beat other Energy Alternatives* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz

Exam 3: Water and Energy |
| Week 6 | Week 12: Pollution (Toxicology and Trash) | *Text (Pollution):* Toxicology, Landfills and Trash, Correlation vs Causation* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 13: Pollution (Smog, Acid Rain, Ozone Depletion) | *Text (Pollution):* Local Air Pollution, Acid Rain, Ozone Depletion, Electromagnetic Spectrum* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 14: Pollution (Global Climate Change Science) | *Text (Pollution):* Global climate Change Science, Global Climate Change Human Caused* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz
 |
| Week 15: Pollution (Global Climate Change Current and Future) | *Text (Pollution):* Global Climate Change Current and Future*Additional Reading:* Global Climate Change and California* Pre-Discussion Quiz
* Discussion (in class or online)
* Post-Discussion Quiz

Exam 4: Pollution |
| Week 16: Final Exam | Final Exam (cumulative) |